Agrium
Conda Phosphate Operations

Agrium's Response to
EPA's Letter Dated August 31, 2005

Agrium asserts a claim of confidentiality with respect to the information contained herein. The information to which this confidentiality claim applies constitutes trade secret, privileged or confidential commercial or financial information, and/or information specifically exempted from disclosure by statute. Such information has been maintained in confidence by Agrium and is not reasonably obtainable by use of legitimate means without Agrium's consent, and Agrium intends to continue its existing practice of protecting the confidentiality of all information subject to this claim of confidentiality.

Public disclosure of the information for which Agrium asserts this confidentiality claim would cause substantial harm to Agrium's competitive position. Furthermore, the information to which this claim applies does not constitute emission data, standards or limitations within the meaning of Clean Air Act §114(c), or other similar relevant federal and/or state provisions. This information includes commercial and/or financial-related information regarding confidential, commercially valuable plans, processes or devices. Because Agrium's business is highly competitive in nature, the disclosure of any such information would substantially harm Agrium's business position by depriving it of an advantage inherent in such information, and/or by providing Agrium's competitors with the ability to derive a benefit from such information to Agrium's detriment. For example, certain information to which this claim applies potentially could be used by Agrium's competitors to project Agrium's future production and/or pricing patterns, to gain insight into Agrium's proprietary process designs and/or production and marketing strategies, and/or to negatively influence public/consumer perceptions of Agrium and Agrium products.

In the event that EPA, or the Idaho Department of Environmental Quality ("IDEQ") receives a request for public disclosure of any information contained herein, Agrium requests that EPA and/or IDEQ notify Agrium immediately upon receiving any such request, notify Agrium of any determination by EPA and/or IDEQ with respect to the confidentiality of such information, and provide Agrium an opportunity to comment regarding any such EPA/IDEQ determination prior to the public disclosure of the requested information.

AGRIUM/CONDA
CBI Document Production Index
in Response to 8/31/05 EPA Info. Request

BATES PREFIX	BEG BATES	END BATES	DATE	DOC TYPE	AUTHOR	RECIPIENT	DESCRIPTION
AGR-CBI	002148	002148		File Cover			File cover sheet, "North End Ball Mill" (documents located at AGR-CBI 002148-002227)
AGR-CBI	002149	002149		File Cover			Sub-File cover sheet, "Normal Operations" (documents located at AGR-CBI 002149-002176)
AGR-CBI	002150	002152	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Normal Operation
AGR-CBI	002153	002156	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Normal Operation
AGR-CBI	002157	002160	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Normal Operation
AGR-CBI	002161	002163	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Normal Operation
AGR-CBI	002164	002166	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Normal Operation
AGR-CBI	002167	002169	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Normal Operation
AGR-CBI	002170	002172	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Normal Operation
AGR-CBI	002173	002176	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Normal Operation
AGR-CBI	002177	002177		File Cover			Sub-File cover sheet, "Normal Operations" (documents located at AGR-CBI 002177-002189)
AGR-CBI	002178	002180	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Normal Operation
AGR-CBI	002181	002183	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Normal Operation
AGR-CBI	002184	002189	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, #1 Mill or #2 Mill
AGR-CBI	002190	002190		File Cover			Sub-File cover sheet, "Shut Downs" (documents located at AGR-CBI 002190-002027)
AGR-CBI	002191	002193	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Normal Operation
AGR-CBI	002194	002196	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Normal Operation
AGR-CBI	002197	002201	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, #1 Mill or #2 Mill

AGRIUM/CONDA
CBI Document Production Index
in Response to 8/31/05 EPA Info. Request

BATES PREFIX	BEG BATES	END BATES	DATE	DOC TYPE	AUTHOR	RECIPIENT	DESCRIPTION
AGR-CBI	002202	002204	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, #1 Mill or #2 Product Tank
AGR-CBI	002205	002208	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, #1 and/or #2 Mill
AGR-CBI	002209	002212	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Rock Storage Tank
AGR-CBI	002213	002215	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Emergency Shutdown of #1 and/or #2 Mill
AGR-CBI	002216	002218	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Emergency Shutdown of #1 and/or #2 Mill
AGR-CBI	002219	002221	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Emergency Shutdown of #1 and/or #2 Mill
AGR-CBI	002222	002224	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Emergency Shutdown of #1 and/or #2 Mill
AGR-CBI	002225	002227	2/28/2003	SOPs	Agrium Conda Phosphate Operations		Standard Operating Procedures: Ball Mill, Emergency Shutdown for Transfer Pumps

North End
Ball Mill

Normal Operations

Agrium

Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Normal Operation

Ball Mill-DCS/A-Operator-01
2/28/03

Reviewed by:_____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, normal operation of DCS/A-operator.

Requirements: All P.P.E. must be available and worn. Must be DCS/A-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toe footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. Operating DCS control computer
2. Radio communication

Steps		Key Points	PPE/Hazards
1.	Operate the Wash Plant.	**Refer to Wash Plant normal operation SOP.**	
2.	Fill out log sheet such as grab samples from B-operator, downtime, and Mill flushes.		
3.	Watch for upsets on DCS control computer.		
4.	Assist B-operator with upsets.	**B-operator will notify any upsets.**	
5.	Will notify B-operator, if they are needed to assist any other operator.		

Training Notes:

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Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

With my signature I am acknowledging that I have read the procedure, I understand the procedure and that I will comply with the procedure.

TRAINEE: _____

DATE: _____

Agrium

Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Normal Operation

Ball Mill-Adding Balls-01
2/28/03

Reviewed by:_____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, adding balls to Mills.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. Operating DCS control computer.
2. Radio communication.

Steps		Key Points	PPE/Hazards
1.	DCS will alarm when balls need to be added.	**Set point is 11,500.**	
2.	DCS operator will notify B-operator when to add balls.	**VIA radio.**	
3.	Put safety chains up for crane use.	**Done by B-operator.**	
4.	Locate remote control for crane. Should be in BFD room.	**Done by B-operator.**	
5.	Verify breaker for crane is engaged.	**Done by B-operator.**	
6.	Verify shackle and pin are tightly secured to ball bucket.	**Done by B-operator.**	
7.	Move crane hook to pick-up ball bucket.	**Done by B-operator.**	
8.	Move ball bucket to ball bin discharge chute.	**Done by B-operator.**	
9.	Remove pin from discharge chute ram.	**Done by B-operator.**	
10.	Fill ball bucket up to 3600 Lbs, ball bucket is marked for Lbs.	**Done by B-operator.**	
11.	Put pin back in discharge chute ram.	**Done by B-operator.**	
12.	Remove board from ball chute to Mill.	**Done by B-operator.**	
13.	Use water lance to clean out ball chute and notify DCS operator.	**Done by B-operator.**	
14.	Raise the ball bucket up to ball chute.	**Done by B-operator.**	
15.	Start putting balls into mill, you may have to use a double jack and hit the rod plunger to get started.	**Done by B-operator.**	
16.	Verify ball bucket is empty.	**Done by B-operator.**	
17.	Lift ball bucket up and move it out of your way.	**Done by B-operator.**	
18.	Use the lance to verify all balls are out of ball chute.	**Done by B-operator.**	
19.	Notify DCS operator that you are done.	**Done by B-operator.**	

Steps		Key Points	PPE/Hazards
20.	DCS operator will acknowledge alarm.		
21.	Put the board back on ball chute.	**Done by B-operator.**	
22.	Set the ball bucket on board and remove crane hook from ball bucket.	**Done by B-operator.**	
23.	Verify breaker for crane is disengaged.	**Done by B-operator.**	
24.	Return remote control for crane to BFD room.	**Done by B-operator.**	

Training Notes:

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TRAINEE: _____

DATE: _____

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Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Normal Operation

Ball Mill-B-Operator-01
2/28/03

Reviewed by: _____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, normal operation of B-operator.

Requirements: All P.P.E. must be available and worn. Must be B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toe footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. Radio communication

Steps		Key Points	PPE/Hazards
1.	Will assist DCS operator by watching control computer when asked.		
2.	Walking the belts and cleaning chutes.		
3.	Watching for any upsets in overall equipment.		
4.	Looking for upset conditions in belt line, such as bad skirting, clips, rollers, pulleys, bearings, scrapers, torches, and misalignment of belt.	**Notify DCS operator of any concerns.**	
5.	Taking grab samples of Mill product.	**Refer to SOP.**	
6.	Looking for any leaks in water, air, oil, and gas lines.	**Notify DCS operator of any concerns.**	
7.	Looking for upsets in temperatures on motors, compressors, pumps, greasers, and general equipment.	**Notify DCS operator of any concerns.**	
8.	Watching for leaks in Mill trunnions.	**Notify DCS operator of any concerns.**	
9.	Cleaning spills from feed belts.	**Use bobcat when necessary.**	
10.	General cleaning of area inside and outside of building.	**Includes trash, tools, etc.**	
11.	Cleaning rest room.		
12.	Looking for upsets in pumps such as packing, bearings, and drive belts.	**Notify DCS operator of any concerns.**	
13.	Adding balls to Mills.	**Refer to SOP.**	
14.	Measuring ball depths.	**Refer to SOP.**	
15.	Verify ball bin inside is always full.		
16.	Verifying cowly lake level.	**Notify DCS operator of level.**	
17.	Density line and bubble tube flush once a shift.	**Refer to shutdown SOP.**	
18.	Looking for upset conditions in speed switches and flag switches.	**Notify DCS operator of any concerns.**	

Steps		Key Points	PPE/Hazards
19.	Verifying that all interlocks are working properly on belt system, by doing a routine check.	**This can only be done with both Mills down.**	
20.	Starting Reclaim washed ore system.	**Refer to SOP, which is located in Reclaim manual.**	
21.	Will assist other operator in other area when asked.	**DCS-Operator or Shifter will let you know.**	

Training Notes:

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TRAINEE: _____

DATE: _____

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Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Normal Operation

Ball Mill-Bobcat-01
2/28/03

Reviewed by: _____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, a normal operation of Bobcat.

Requirements: All P.P.E. must be available and worn. Must be B-operator certified.

Required Documents: Operator's Manual.

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves	Equipment Damage	

TASKS: List ALL tasks within this procedure.

1. Operating Bobcat.
2. Radio communication.
3. Inspection report.

Steps		Key Points	PPE/Hazards
1.	Walk around equipment before starting and check for fluid leaks.		
2.	Check tires for proper inflation, rims, and lug bolts.		
3.	Check bucket arms, articulation joints, and pins.		
4.	Check all fluid levels before starting bobcat.	**Fluid levels to check are engine oil, hydraulic oil, coolant, transmission oil, and fuel.**	
5.	Go ahead and sit in the seat.	**Fasten seat belt securely.**	
6.	There are 2 throttle controls to choose from.	**One is a foot control and the other is a lever control that is located on the right side of you.**	
7.	Turn the key counter clockwise, this will glow plug the system.	**Key is located on right side of bobcat.**	
8.	Verify that transmission control lever and hydraulic lever are in neutral.		
9.	Turn key clockwise to start the engine.		
10.	Verify that all hydraulic controls are working.	**Lever is located on the right side of you.**	
11.	Perform work that is needed.		
12.	When work is done, take bobcat back to desired location.		
13.	Before shutting down the bobcat, you must first decelerate the engine.	**Use the lever control.**	
14.	Verify that the bucket and all attachments are lowered.		
15.	Verify that the transmission is in neutral.	**Shut down the bobcat by turning the key off.**	

Training Notes:

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TRAINEE: _____

DATE: _____

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Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Normal Operation

Ball Mill-Measuring Ball Depth-01
2/28/03

Reviewed by:_____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, measuring ball depth.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. Operating DCS control computer.
2. Radio communication.

Steps		Key Points	PPE/Hazards
1.	Verify Mill is down.		
2.	B-operator to Lock and tag Mill motor.	**DCS operator to try Mill motor.**	
3.	Open the 2 doors on discharge of Mill.	**Done by B-operator.**	
4.	Using the measuring rod and flashlight.	**Rod is located by north door of BFD room.**	
5.	Insert the rod in as far as you can reach, using your flashlight read what the depth is.	**Done by B-operator.**	
6.	Lifting the rod out of the water and bringing it towards you.	**Done by B-operator.**	
7.	Set it back in on the west end of the balls, using your flashlight read what the depth is.	**Done by B-operator.**	
8.	Return rod to locating you found it.	**Done by B-operator.**	
9.	Notify DCS operator on Ball depths.	**DCS operator to put depths on log sheet.**	
10.	Close the 2 doors on discharge of Mill.	**Done by B-operator.**	
11.	Unlock Mill motor and notify DCS operator that you are done.	**Done by B-operator.**	

Training Notes:

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Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

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TRAINEE: _____

DATE: _____

Agrium

Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Normal Operation

Ball Mill-Grab Samples-01
2/28/03

Reviewed by: _____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, normal operation of grab samples.

Requirements: All P.P.E. must be available and worn. Must be B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toe footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. Grabbing and weighing of sample.
2. Radio communication.

Steps		Key Points	PPE/Hazards
1.	Verify1000 ML glass beckon is clean.	**Wash it out and dry it completely if not.**	
2.	Put beckon on scale and zero it.	**Zero button for scale is located on bottom right side of scale.**	
3.	Verify sample bottle is clean.		
4.	Take bottle to desired Mill of sampling port and fill it up.	**Sampling port is located on density line.**	
5.	Take bottle to scale and fill beckon to 1000 ML mark, without spilling any material on outside of beckon.	**Verify Specific gravity and report it to DCS-operator.**	
6.	Repeat steps 1 through 5 for each sample.		
7.	When all samples have been taken wash and dry beckon and bottle.	**Put beckon and bottle back in desired location.**	

Training Notes:

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TRAINEE: _____

DATE: _____

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Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Normal Operation

Ball Mill-Cleaning Oversize Chute-01
2/28/03

Reviewed by: _____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, cleaning oversize chute from #1 or #2 Mill.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. Operating DCS control computer.
2. Radio communication.

Steps		Key Points	PPE/Hazards
1.	Mill must be down.		
2.	Open the 2 doors on west end of Mill.	**Done by B-operator.**	
3.	Verify wheel barrel is under discharge of oversize chute.	**Done by B-operator.**	
4.	Using a water hose, proceed with cleaning of all material.	**Done by B-operator.**	
5.	Verify chute is completely clean and return hose to desired location.	**Done by B-operator.**	
6.	Close the 2 doors.	**Done by B-operator.**	
7.	Dump the wheel barrel in desired location on west end of mill building.	**Done by B-operator.**	
8.	Return wheel barrel to discharge of oversize chute.		

Training Notes:

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Conda Phosphate Operations

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TRAINEE: _____

DATE: _____

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Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Normal Operation

Ball Mill-Inching of #1 or #2 Mill-01
2/28/03

Reviewed by:_____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, inching of #1 or #2 Mill.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator and B-operator certified.

Required Documents:
Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. Operating DCS control computer.
2. Radio communication.

Steps		Key Points	PPE/Hazards
1.	Start lift pumps.		
2.	B-operator to lock and tag Mill motor.	**DCS operator to try Mill motor.**	
3.	Remove key from breaker marked inch drive.	**Done by B-operator.**	
4.	Remove handrail from in front Mill to access inch drive.	**Done by B-operator.**	
5.	Take the inch drive key to unlock guard door to access Mill spline.	**Done by B-operator.**	
6.	Lift door up until it latches open.	**Done by B-operator.**	
7.	Move the inch drive into place.	**Done by B-operator.**	
8.	Move handle on inch drive gear to position it over Mill spline.	**Done by B-operator.**	
9.	Tighten bolts on inch drive.	**Done by B-operator.**	
10.	Verify electric cord from hydraulic pump is not plugged in.	**Done by B-operator.**	
11.	Hook hydraulic hoses from hydraulic pump to inch drive.	**Done by B-operator.**	
12.	Verify power source switch on hydraulic pump is in the off position.	**Done by B-operator.**	
13.	Plug in electric cord from hydraulic pump to the desired Mill plug in.	**Done by B-operator.**	
14.	Locate key witch is hanging on clutch control panel on north side of desired Mill.	**Done by B-operator.**	
15.	Insert key and turn it from normal mode to inch drive.	**Done by B-operator.**	
16.	B-operator to notify DCS operator that Mill is ready to be inched.		
17.	DCS operator will put proper by-passes on clutch permissive.		
18.	Proper by-passes are Mill motor, Product pumps, Not normal mode, Mill reducer safety, and Mill reducer off.		

Steps		Key Points	PPE/Hazards
19.	Start clutch permissive.		
20.	Start power source for hydraulic pump.	**Done by B-operator.**	
21.	Put handle on hydraulic pump in the forward position.	**Done by B-operator.**	
22.	Turn Mill for 1 full revolution.	**Turn handle back to neutral position.**	
23.	Shut power source off to hydraulic pump, un-plug electric cord.	**Done by B-operator.**	
24.	Notify DCS operator that you are done inching Mill and turn key back to normal mode and hang key back on hook.	**Done by B-operator.**	
25.	DCS operator will take by-passes off clutch permissive.		
26.	Un-hook hydraulic hoses from inch drive and role hoses back-up.	**Done by B-operator.**	
27.	Un-hook inch drive gear from Mill spline.	**Done by B-operator.**	
28.	Un-bolt inch drive and turn it sideways, re-bolt inch drive finger tight.	**Done by B-operator.**	
29.	Put gate back down and latch it closed, lock gate and return key to Mill breaker.	**Done by B-operator.**	
30.	Un-lock Mill motor and rack breaker back in, notify DCS operator that you are done.	**Done by B-operator.**	

Training Notes:

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Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

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TRAINEE: _____

DATE: _____

Start-Ups

Agrium

Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Normal Operation

Ball Mill-Start up of Clutch Compressor -01
2/28/03

Reviewed by:_____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, a start up of the Instrument Air Compressor.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. **Verifying oil levels**
2. **Verifying water flow**
3. **Opening and Closing valves**
4. **Starting Compressor**

Steps		Key Points	PPE/Hazards
1.	Verify breaker is on.	**Located in Ball Mill MCC.**	
2.	Verify that 1" valve off of tank is closed.		
3.	Start compressor.		
4.	Let the tank build to maximum air pressure.	**Compressor will automatically shut down at maximum air pressure.**	
5.	Slowly open 1" valve off of tank.		

Training Notes:

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Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

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TRAINEE: _____

DATE: _____

Agrium

Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Normal Operation

Ball Mill-Start up of Instrument Air Compressor -01
2/28/03

Reviewed by:_____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, a start up of the Instrument Air Compressor.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. **Verifying oil levels**
2. **Verifying water flow**
3. **Opening and Closing valves**
4. **Starting Compressor**

Steps		Key Points	PPE/Hazards
1.	Verify breaker is on.	**Located in Ball Mill MCC.**	
2.	Verify main isolation valve is closed.		
3.	Open water-cooling valve.		
4.	Push the Modulate button.		
5.	Set the mode switch to unload position.		
6.	Push start button.		
7.	Verify that you have oil pressure.		
8.	Wait for unit to warm up.	**Should take 2-5 minutes.**	
9.	Set the mode switch to normal position.	**Air pressure should rise to pre-set maximum.**	
10.	Slowly open discharge valve.		

Training Notes:

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TRAINEE: _____

DATE: _____

Agrium

Conda Phosphate Operations

Standard Operating Procedures

BALL MILL

#1 MILL OR #2 MILL

BALL MILL-Startup-01
2/28/03

Reviewed by: _____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, a start up of #1 or #2 Mill at the same time, individually, or with one or the other Mill already going.

Requirements: All P.P.E. must be available and worn. Must be DCS/A-Operator certified and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves 6. DCS-Operator should never leave control room during start up.	• Natural Gas.	

TASKS: List ALL tasks within this procedure.

1. Operating DCS control computer
2. Radio communication
3. Turning valves

Steps		Key Points	PPE/Hazards
1.	Start Lift pumps.	**To desired Mill.**	

NOTE
B-Operator to verify pressures on lift pumps to Mill bearings.

2.	Start oil pump.	**To desired Mill.**	
3.	Verify bypasses on Mill motor.	**To desired Mill.**	
4.	Push siren button.	**Wait 5 seconds.**	
5.	Start Mill motor.	**To desired Mill.**	
6.	Open ¾ " ball valve for heat exchanger to desired Mill.	**Done by B-Operator.**	
7.	Verify product tank level indicator is 10 or higher.	**To desired Mill.**	
8.	Verify agitator is on.	**To desired Mill.**	
9.	Verify density valve for desired product pump is in auto.	**To desired Mill.**	
10.	Verify manual valve for desired product pump is open.	**To desired Mill.**	
11.	Open seal water valve to desired product pump.	**Done by B-Operator.**	
12.	Verify flow gauge is not stuck and put set point on 2.5 GPM.		
13.	Verify product tank controller is in auto and put set point on 50.	**To desired Mill.**	
14.	Start product pump.	**To desired Mill.**	
15.	Open suction valve.	**To desired Mill.**	
16.	Verify CP-5 splitter gate is in manual.		

NOTE

Desired set point for CP-5 splitter gate is as follows:

- #1 Mill is 0.
- #2 Mill is 100.
- For both Mills are 50.

	Steps	Key Points	PPE/Hazards
17.	Verify bypasses on clutch permissive.	**To desired Mill.**	
18.	Start clutch permissive.	**To desired Mill.**	
19.	Push siren button.	**Wait 5 seconds.**	
20.	Start clutch engage.	**To desired Mill.**	
21.	Verify reclaim water controller is in auto and put set point on 30.	**To desired Mill.**	
22.	Verify proper belts are on and bypasses are off for desired Mill.		
23.	Verify CP-5 belt speed is at 50.		

NOTE

Desired Mill for desired belts and bypasses are as follows:

- #1 Mill is CP-2
- #2 Mill is CP-5

24.	Verify RC-2 weight controller is in manual.	**Put set point in for desired rate.**	

NOTE

Desired set point for desired Mill will vary from Wash plant feed to Reclaim feed:

- Set point for **Wash Plant** feed will be **Higher** for either Mill
- Set point for **Reclaim** feed will be **Lower** for either Mill

25.	Start the desired feeder.		

NOTE

Desired feeder to choose from are as follows:

- Inside feeder south is for Wash Plant feed
- Reclaim feeder is for Reclaim feed

	Steps	Key Points	PPE/Hazards
26.	When CP-2 weight controller starts to show feed.		

NOTE

Set high and low output for CP-5 Splitter gate.

- High output is 60.
- Low output is 40.

27.	Put CP-5 splitter gate in auto.	**Put set point to desired rate for #2 Mill.**	
28.	Open reclaim water controller to desired flow.	**To desired Mill.**	

NOTE

The reclaim water and heat exchanger water can be put to the top or bottom of #1 Mill chute, here is a reference to use.

- **Water to the top when Mill is on.**
- **Water to the bottom when mill is down or just coming on.**

29.	Put water lances in Mill chutes.	**To desired Mill.**	
30.	Start vibrator.	**Verify timer is set to desired time.**	

NOTE

Desired flow for reclaim water controller are as follows:

- **90 GPM for rate of 100 TPH or less**
- **100 GPM for rate of 100 TPH or more**

Steps		Key Points	PPE/Hazards
31.	Verify you have control of Specific gravity to set point.	**To desired Mill.**	
32.	Verify Specific gravity controller is in IMAN.	**To desired Mill.**	
33.	Cascade reclaim water controller.	**To desired Mill.**	

Training Notes:

Agrium

Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

With my signature I am acknowledging that I have read the procedure, I understand the procedure and that I will comply with the procedure.

TRAINEE: _____

DATE: _____

Shut Downs

Agrium

Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Normal Operation

Ball Mill-Shutdown of Clutch Air Compressor -01
2/28/03

Reviewed by:_____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, a shut down of the Clutch Air Compressor.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. **Verifying oil levels**
2. **Verifying water flow**
3. **Opening and Closing valves**
4. **Shutting down Compressor**

Steps		Key Points	PPE/Hazards
1.	Shut down compressor.		
2.	Close 1" valve off of tank.		
3.	Slowly open drain valve from tank.		

Training Notes:

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Agrium

Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

With my signature I am acknowledging that I have read the procedure, I understand the procedure and that I will comply with the procedure.

TRAINEE: _____

DATE: _____

Agrium

Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Normal Operation

Ball Mill-Shutdown of Instrument Air Compressor -01
2/28/03

Reviewed by:_____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, a shut down of the Instrument Air Compressor.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. **Verifying oil levels**
2. **Verifying water flow**
3. **Opening and Closing valves**
4. **Shutting down Compressor**

Steps		Key Points	PPE/Hazards
1.	Close the discharge isolation valve.		
2.	Set mode switch to unload.	**Let unit run for 2 minutes or mode unloaded.**	
3.	Push stop button.		
4.	Push on/off line button.		
5.	Shut off cooling water.		

Training Notes:

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Agrium

Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

With my signature I am acknowledging that I have read the procedure, I understand the procedure and that I will comply with the procedure.

TRAINEE: _____

DATE: _____

Agrium

Conda Phosphate Operations

Standard Operating Procedures

BALL MILL

#1 MILL OR #2 MILL

BALL MILL-Shutdown-01
2/28/03

Reviewed by:_____ Date: _____

Objective: To provide operating personnel with step by step instruction on how to perform, a shutdown of #1 or #2 Mill at the same time, individually, or with one or the other Mill already going.

Requirements: All P.P.E. must be available and worn. Must be DCS/A-Operator certified and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves 6. DCS-Operator should never leave control room during shutdown.		

TASKS: List ALL tasks within this procedure.

1. Operating DCS control computer
2. Radio communication
3. Turning valves

Steps		Key Points	PPE/Hazards
1.	Stop desired feeder, or lower set point on RC-2 weight controller		

NOTE

Desired feeder or set point to choose from are as follows:

- Inside feeder south is from Wash Plant feed
- Reclaim feeder is from Reclaim feed
- Set point for **Wash Plant** feed will be **Higher** for either Mill
- Set point for **Reclaim** feed will be **Lower** for either Mill

2.	Put reclaim water controller from cascade to auto.	**To desired Mill.**	
3.	When CP-2 weight controller starts to show loss of feed.		
4.	Put reclaim water controller to 125.	**To desired Mill.**	
5.	If #1 Mill is shutting down with #2 Mill still going, move the water to the bottom of chute.	**Done by B-Operator.**	
6.	Adjust CP-5 splitter gate to desired set point.	**Take controller out of auto.**	

NOTE

Desired set point for desired Mill are as follows:

- 100 is for #1 Mill
- 0 is for #2 Mill

7.	If #2 Mill is shutting down then, Verify CP-5 belt is clear of feed.	**Put by-pass on for CP-5 belt from Cp-2 belt.**	
8.	Put set point on CP-5 splitter gate to 30.		

Steps		Key Points	PPE/Hazards
9.	Verify feed is completely out of Mill, time yourself for 10 minutes.	**To desired Mill.**	
10.	Lower set point on product tank level controller to 15.	**To desired Mill.**	
11.	When 10 minutes are up, put reclaim water controller to 0.	**To desired Mill.**	
12.	Wait 2 minutes and then push siren button.	**To desired Mill.**	
13.	Stop clutch engage.	**To desired Mill.**	
14.	Verify lift pumps came on.	**To desired Mill.**	
15.	Stop clutch permissive.	**To desired Mill.**	
16.	Stop Mill motor.	**To desired Mill.**	
17.	Stop oil pump.	**To desired Mill.**	
18.	Shut ¾ " ball valve for heat exchanger to desired Mill.	**Done by B-Operator.**	
19.	Wait for product tank level controller to reach 15.	**To desired Mill.**	
20.	Close suction valve to product pump.	**To desired Mill.**	
21.	Stop product pump.	**To desired Mill.**	
22.	Open drain valve on product line from the desired Mill.	**Done by B-Operator.**	
23.	Put density valve in manual and close valve.	**To desired Mill.**	
24.	Hook up water hose from desired Mill to flush.	**Done by B-Operator.**	
25.	Flush density line out for 2 minutes.		
26.	From desired Mill, write density flow and specific gravity from DCS on log sheet.	**Verify what B-Operator has in Mill.**	
27.	Open density valve from desired Mill to flush into pump	**B-Operator to close ¾ " ball valve on desired density line.**	
28.	Verify desired Mill product line is drained.	**B-Operator to stop flushing.**	

Steps		Key Points	PPE/Hazards
29.	Put density valve in auto.	**To desired Mill.**	
30.	Close seal water valve from desired Mill product pump.	**Done by B-Operator.**	
31.	Close drain valve from desired Mill product pump.	**Done by B-Operator.**	
32.	Wait 1 hour after lift pumps came on.	**To desired Mill.**	
33.	Stop lift pumps.	**To desired Mill.**	

NOTE

If both Mills are down, need to pull safety cords on belts to verify interlocks are working. Verify that fires on belts are also going off. If it is cold outside start all belts and fires back up.

Training Notes:

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Agrium

Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

With my signature I am acknowledging that I have read the procedure, I understand the procedure and that I will comply with the procedure.

TRAINEE: _____

DATE: _____

Agrium

Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

#1 or #2 Product Tank

Ball Mill-Long term shutdown-01
2/28/03

Reviewed by:_____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, a long term shutdown of #1 or #2 product tank.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator certified and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

Long term shutdown of #1 or #2 product tank.

TASKS: List ALL tasks within this procedure.

1. Operating DCS control computer.
2. Radio communication.

Steps		Key Points	PPE/Hazards
1.	Open drain valve on product tank.	**Done by B-operator.**	
2.	Verify product tank level controller reaches 10.		
3.	Stop agitator.		
4.	Put bypasses on both suction valves.		
5.	Open drain valves on both product lines.	**Done by B-operator.**	
6.	Open both suction valves.		
7.	Wash product tank out completely.	**Done by B-operator.**	
8.	Verify product tank is wash out.	**Done by Shift supervisor.**	
9.	Take by-passes off both suction valves.		
10.	To verify that product pumps and lines are drained.	**Leave product line drain valves open.**	
11.	Put density valves in manual.	**Open density valves.**	
12.	Hook up water hose to density line.	**Done by B-operator.**	
13.	Flush lines until product is cleaned out of lines.	**Verified by B-operator.**	
14.	Stop flushing with water hose.	**Done by B-operator.**	
15.	Put density valve in auto.		
16.	Close product line drain valves.	**Done by B-operator.**	
17.	Close product tank valve.	**Done by B-operator.**	

Training Notes:

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Agrium

Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

With my signature I am acknowledging that I have read the procedure, I understand the procedure and that I will comply with the procedure.

TRAINEE: _____

DATE: _____

Agrium

Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

#1 and/or #2 Mill

Ball Mill-Long term Shutdown-01
2/28/03

Reviewed by: _____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, a shutdown of #1 and/or #2 Mill.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator certified and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. Operating DCS control computer.
2. Radio communication.

Steps		Key Points	PPE/Hazards
1.	Stop feeder.	**Inside feeder south or Reclaim feeder.**	
2.	Put reclaim water controller from cascade to auto.	**Put set point on 150.**	
3.	Verify feed is completely out of mills.		
4.	Verify all chutes and belts are clean.	**Done by B-operator.**	
5.	Flush mill out to a 1.300 Specific Gravity.		
6.	Lower set point on product tanks to 15.		
7.	Put reclaim water controller to 0.		
8.	Wait 5 minutes.	**Push siren button.**	
9.	Stop clutch engage.	**Verify lift pumps are on.**	
10.	Stop clutch permissive.	**Push siren button.**	
11.	Stop Mill motor.		
12.	Stop oil pump.		
13.	Shut valve for heat exchanger.	**Done by B-operator.**	
14.	Wait for product tank level controller to reach 15.		
15.	Close suction valve to product pump.		
16.	Stop product pump.		
17.	Open drain valve on product line.	**Done by B-operator.**	
18.	Put density valve in manual.	**Close density valve.**	
19.	Hook-up water hose for flush.	**Done by B-operator.**	

Steps		Key Points	PPE/Hazards
20.	Flush density line out for 2 minutes.		
21.	Open density valve to flush into pump.	**B-operator to close valve on density line.**	
22.	Verify product line is drained.	**B-operator to stop flushing with hose.**	
23.	Put density valve in auto.		
24.	Close seal water valve to product pump.	**Done by B-operator.**	
25.	Close drain valve on product line.	**Done by B-operator.**	
26.	Wait 1 hour after lift pumps came on.	**Time yourself.**	
27.	Stop lift pumps.		

Training Notes:

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Agrium

Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

With my signature I am acknowledging that I have read the procedure, I understand the procedure and that I will comply with the procedure.

TRAINEE: _____

DATE: _____

Agrium

Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Rock storage tank

Ball Mill-Long term shutdown-01
2/28/03

Reviewed by: _____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, a long term shutdown of Rock storage tank.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator certified and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. Operating DCS control computer.
2. Radio communication.

Steps		Key Points	PPE/Hazards
1.	Put transfer pump controller in manual.	**Put set point on desired rate.**	
2.	Verify tank level controller reaches 6.	**When 6 is reached, stop agitator.**	
3.	Pump tank down until transfer pump starts to cavitate.	**Flow and amps will start fluctuating.**	
4.	Put suction and discharge valves in manual.		
5.	Close suction valve.		
6.	Stop transfer pump.		
7.	Hook up air hose to flush transfer line out.	**Done by B-operator.**	
8.	Start washing on tank with fire hoses.	**Done by B-operator.**	
9.	Start transfer pump when necessary to help with flush.		
10.	When no more solids can be washed to transfer pump.	**Stop transfer pumps.**	
11.	Open man door on southwest side of tank.	**Done by B-operator.**	
12.	Drain and wash remaining material to cowly lake.	**Done by B-operator.**	
13.	Verify tank is completely drained and washed.	**Done by Shift supervisor.**	
14.	Verify transfer pump is drained.	**Done by B-operator.**	
15.	Open drain valve on transfer line.	**Done by B-operator.**	
16.	Hook up water hose to transfer line.	**Done by B-operator.**	
17.	Verify line is drained by clear water coming out of drain line.	**Done by B-operator.**	
18.	Stop flushing with water hose.	**Done by B-operator.**	
19.	Shut seal water valve to product pump.	**Done by B-operator.**	

Long term shutdown of Rock storage tank.

Steps		Key Points	PPE/Hazards
20.	Close discharge valve on transfer line.		
21.	Close drain valve on transfer line.	**Done by B-operator.**	
22.	Verify rock storage tank agitator will turn by hand before starting it back up		

Training Notes:

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Agrium

Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

With my signature I am acknowledging that I have read the procedure, I understand the procedure and that I will comply with the procedure.

TRAINEE: _____

DATE: _____

Agrium

Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Emergency Shutdown of #1 and/or #2 Mill

Ball Mill-Lost Feed -01
2/28/03

Reviewed by: _____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, a emergency shutdown on #1 and/or #2 Mill.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator certified and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. Operating DCS control computer.
2. Radio communication.

Steps		Key Points	PPE/Hazards
1.	If feed is lost to the Mills for less than 5 minutes.	**Proceed with normal operation.**	
2.	If feed is lost to the Mills for more than 5 minutes, but will return within 30 minutes.		
3.	Put reclaim water controller from cascade to auto.	**Put set point on 30.**	
4.	When feed is restored within 30 minutes.		
5.	Put in desired flow on reclaim water controller.		
6.	Verify you have control of Specific Gravity to set point.		
7.	Put reclaim water controller in cascade.		
8.	If feed to Mills is more than 30 minutes.		
9.	Proceed with normal shutdown.	**Refer to normal shutdown SOP.**	

Training Notes:

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Agrium

Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

With my signature I am acknowledging that I have read the procedure, I understand the procedure and that I will comply with the procedure.

TRAINEE: _____

DATE: _____

Agrium

Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Emergency Shutdown of #1 and/or #2 Mill

Ball Mill-Power outage-01
2/28/03

Reviewed by: _____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, an emergency shutdown on #1 and/or #2 Mill.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator certified and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. Operating DCS control computer.
2. Radio communication.

Steps		Key Points	PPE/Hazards
1.	All valves in Ball Mill are failed close.	**Valves will shut in a power outage.**	
2.	Verify reclaim water valves did shut.	**Done by B-operator.**	
3.	Manual valves will need to be closed if auto valves did not.	**Done by B-operator.**	
4.	Verify how long power will be out.	**If possible.**	
5.	Verify weather condition, cold and/or freezing etc.	**If power is not on within 30 minutes.**	
6.	Clean all belts of material.	**So they don't freeze to the belts.**	
7.	Pull covers from belts and clean material off.	**Put covers back on when done.**	
8.	If power comes on within 2 hours.	**Proceed with normal start-up.**	
9.	If power comes on after 2 hours.		
10.	Mill will need to be inched.	**Refer to Inching of Mill SOP.**	
11.	Then proceed with normal start-up.		
12.	Verify rock storage tank agitator will turn by hand before starting it back up		

Training Notes:

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Agrium

Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

With my signature I am acknowledging that I have read the procedure, I understand the procedure and that I will comply with the procedure.

TRAINEE: _____

DATE: _____

Agrium

Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Emergency Shutdown of #1 and/or #2 Mill

Ball Mill-Lost Fresh Water-01
2/28/03

Reviewed by: _____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, an emergency shutdown on #1 and/or #2 Mill.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator certified and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. Operating DCS control computer.
2. Radio communication.

Steps		Key Points	PPE/Hazards
1.	Interlocks for Lo-Lo seal water to product pump will shut them down.		
2.	Suction valves will close.		
3.	Mill clutch will disengage.		
4.	All belts will go down.		
5.	Verify all of this equipment did go down.	**If not shut them down.**	
6.	Put reclaim water controller from cascade to auto.	**Put set point on 0.**	
7.	Verify why fresh water is off.	**Put fresh water back into service.**	
8.	Verify fresh water has returned.		
9.	If fresh water is returned within 2 hours.	**Proceed with normal start-up.**	
10.	If fresh water is returned after 2 hours.		
11.	Mill will need to be inched.	**Refer to inching of Mill SOP.**	
12.	Then proceed with normal start-up.		

Training Notes:

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Agrium

Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

With my signature I am acknowledging that I have read the procedure, I understand the procedure and that I will comply with the procedure.

TRAINEE: _____

DATE: _____

Agrium

Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Emergency Shutdown of #1 and/or #2 Mill

Ball Mill-Lost reclaim water-01
2/28/03

Reviewed by: _____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, a emergency shutdown on #1 and/or #2 Mill.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator certified and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

TASKS: List ALL tasks within this procedure.

1. Operating DCS control computer.
2. Radio communication.

Steps		Key Points	PPE/Hazards
1.	Interlocks on Mills for Lo-Lo water flow should stop all belts.		
2.	Verify belts are down.	**If they are not, then stop all belts.**	
3.	Put reclaim water controller to auto.		
4.	Verify fresh water valve to reclaim water system is open in Wash Plant.	**Shut down Wash Plant.**	
5.	Verify reclaim water line to Ball Mill is pressured back up.		
6.	Put in desired flow to reclaim water controller.		
7.	Start belts from Mills to inside feeder south.		
8.	Verify you have control of Specific Gravity to Set point.		
9.	Cascade reclaim water controller.		

Training Notes:

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Agrium

Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

With my signature I am acknowledging that I have read the procedure, I understand the procedure and that I will comply with the procedure.

TRAINEE: _____

DATE: _____

Agrium

Conda Phosphate Operations

Standard Operating Procedures

Ball Mill

Emergency Shutdown for Transfer pumps

Ball Mill-Fresh water -01
2/28/03

Reviewed by: _____ Date: _____

Objective: To provide operating personnel with step-by-step instruction on how to perform, an emergency shutdown for Transfer pumps.

Requirements: All P.P.E. must be available and worn. Must be DCS A-operator certified and B-operator certified.

Required Documents:

Tools and Equipment:

PPE	Hazards	Environmental Considerations
1. Hardhat 2. Safety glasses 3. Hearing protection 4. Safety toed footwear 5. Work gloves		

Lost fresh water to transfer pump

TASKS: List ALL tasks within this procedure.

1. Operating DCS control computer.
2. Radio communication.

Steps		Key Points	PPE/Hazards
1.	Interlocks for Lo-Lo seal water will shut down transfer pump.		
2.	Verify suction and discharge valves did shut.	**Done by B-operator.**	
3.	Put transfer pump controller to manual.		
4.	Put suction and discharge valves from auto to manual.		
5.	Verify why fresh water is off.	**Put fresh water back in service.**	
6.	If fresh water is returned within 15 minutes.	**Proceed with start-up SOP.**	
7.	If fresh water is not returned within 15 minutes.	**Open discharge valve.**	
8.	Hook up air hose to transfer line and flush for 5 minutes at full valve.	**After 5 minutes put valve on ¼ open.**	
9.	Verify fresh water is back.	**Shut air hose off.**	
10.	Verify seal water is on to transfer pump.	**Done by B-operator.**	
11.	Verify transfer pump controller is still in manual.	**Put set point on 25.**	
12.	Start transfer pump.		
13.	Open suction valve.		
14.	Verify you have a flow.	**Flow should be between 200 & 300.**	
15.	Put transfer pump controller in auto.	**Put set point on 300.**	
16.	Put suction and discharge valves back in auto.		

Training Notes:

Agrium

Conda Phosphate Operations

OPERATIONS PROCEDURE ACKNOWLEDGEMENT

With my signature I am acknowledging that I have read the procedure, I understand the procedure and that I will comply with the procedure.

TRAINEE: _____

DATE: _____